CLAIM AMENDMENTS

1. (Currently amended) A recombinant nucleic acid for promoting microbial production of L-serine directly from carbohydrates, by avoiding or at least reducing decomposition of the L-serine to pyruvate and which is ~~replicatable~~ capable of replication in a microorganism of the family Corynebacterium ~~and optionally a recombinant nucleic acid, characterized in that it has~~ said recombinant nucleic acid having at least one serine biosynthesis sequence selected from the group consisting of serA, serB and serC and a nucleotide sequence ~~coding for~~ encoding L-serine dehydratase which is partially or completely deleted or is mutated [[or]] and which is expressed to a lesser degree than the expression of the naturally occurring L-serine dehydratase having nucleotide sequence of SEQ ID NO: 1 or which is not expressed at all.

2. (Currently amended) A recombinant nucleic acid according to claim 1, ~~characterized in that the sdaA gene~~ wherein the nucleotide sequence encoding L-serine dehydratase is partially ~~or completely~~ deleted or is mutated [[or]] and expressed to a lesser extent [[by]] in comparison with the expression of the naturally occurring sequence of SEQ ID NO: 1 or not expressed at all.

3. (Currently amended) A recombinant nucleic acid according to ~~claim 1~~ claim 2, ~~characterized by~~ wherein the nucleotide sequence encoding L-serine dehydratase is a nucleotide sequence according to SEQ ID NO 1 whose nucleotides [[form]] from position 506 to position 918 are completely or partially deleted or are mutated, or an allele functionally equivalent thereto, or a homolog having a sequence complementary ~~or derivative of this~~ to said nucleotide sequence according to SEQ ID NO 1 whose nucleotides from position 506 to position 918 are completely or partially deleted or are mutated or a nucleotide sequence hybridizing ~~therewith~~ under stringent conditions with said nucleotide sequence according to SEQ ID NO 1 whose nucleotides from position 506 to position 918 are completely or partially deleted or are mutated.

4. (Currently amended) A recombinant nucleic acid according to claim 1, ~~characterized in that it is~~ isolated from a coryneform bacterium.

5. (Currently amended) A recombinant nucleic acid according to claim 1, ~~characterized in that it is~~ isolated from Corynebacterium or Brevibacterium.

6. (Currently amended) A recombinant nucleic acid according to claim 1, ~~characterized in that it is~~ isolated from Corynebacterium glutamicum or Brevibacterium flavum.

7. (Previously presented) A gene structure containing at least one nucleotide sequence according to claim 1 and nucleotide sequences having regulatory sequences operatively linked therewith.

8. (Previously presented) A vector containing at least one nucleotide sequence or a gene structure according to claim 7 and additional nucleotide sequences for selection, for replication in the host cell or for integration in the host cell genome.

9 through 13 (canceled)

14. (Currently amended) A microorganism ~~characterized in that it has~~ having at least one serine biosynthesis sequence selected from the group consisting of serA, serB and serC and a nucleotide sequence which ~~codes for~~ encodes an L-serine dehydratase, which is deleted in whole or in part or is mutated [[or]] and which is expressed to a reduced extent [[by]] in comparison with expression of the naturally occurring L-serine dehydratase having nucleotide sequence of SEQ ID NO: 1 or is not expressed at all.

15. (Currently amended) A microorganism according to claim 14, ~~characterized in that its sdaA gene~~ wherein the nucleotide sequence which encodes an L-serine dehydratase has a nucleotide sequence of SEQ ID NO: 1 which is ~~wholly or~~ partially deleted or mutated [[or]] and is expressed to a reduced extent [[by]] in comparison with expression of the naturally occurring ~~sdaA gene~~ L-serine dehydratase or is not expressed at all.

16. (Currently amended) A microorganism ~~according to~~ containing in ~~replicatable~~ a form capable of replication, a nucleic acid according to claim 1.

17. (Currently amended) A microorganism according to claim 14, ~~characterized in~~ that it is a coryneform ~~bacteria~~ bacterium.

18. (Currently amended) A microorganism according to claim 14, ~~characterized in that it brings to the family a~~ belonging to the family of coryneform bacteria or brevibacteria.

19. (Currently amended) A microorganism according to claim 14,~~characterized in that it brings to the family a~~ belonging to the family of Corynebacterium glutamicum or Brevibacterium flavum.

20. (Currently amended) A probe for identifying and/or isolating genes [[for]] coding for proteins which participate in the biosynthesis of L-serine ~~characterized in that they are~~ and which has a length of 10 to 30 nucleic acids, and which contains a partial sequence of the nucleic acid which encodes an L-serine dehydratase, according to claim 1, ~~is produced starting with nucleic acids according to claim 1 and contain~~ serving as a suitable marker for detection of said genes.

21 through 25 (canceled)

26. (New) A recombinant nucleic acid for promoting microbial production of L-serine directly from carbohydrates, by avoiding or at least reducing decomposition of the L-serine to pyruvate and which is capable of replication in a microorganism of the family Corynebacterium said recombinant nucleic acid having at least one serine biosynthesis sequence selected from the group consisting of serA, serB and serC and a nucleotide sequence encoding L-serine dehydratase according to SEQ ID NO 1 whose nucleotides from position 506 to position 918 are completely or partially deleted or are mutated and expressed to a lesser degree than the expression of the naturally occurring L-serine dehydratase having nucleotide sequence of SEQ ID NO: 1 or which is not expressed at all.

27. (New) The recombinant nucleic acid defined in claim 26 having a nucleotide sequence encoding L-serine dehydratase according to SEQ ID NO 1 whose nucleotides from position 506 to position 918 are completely deleted.